AF/2700
#12
12-18-03
P.2

Docket No. RCA 89541

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE

THE BOARD OF PATENT APPEALS AND INTERFERENCES

Applicant: Mary Lafuze Comer | Art Unit: 2613

Serial No.: 09/428,322 | Examiner: George A. Bugg

Filed: October 28, 1999

Title: APPARATUS AND METHOD FOR DERIVING AN ENHANCED DECODED REDUCED-RESOLUTION VIDEO SIGNAL FROM A CODED HIGH-DEFINITION VIDEO SIGNAL

APPLICANTS' APPEAL BRIEF

May It Please the Honorable Board:

For the reasons set forth below, Applicant respectfully requests that the examiner's Final Rejection dated April 22, 2003 be reversed. The following background information is provided in accordance with 37 CFR §1.192(c). The $330.00 fee for filing this Brief is to be charged to Deposit Account 07-0832.

Three copies of the Brief are enclosed. This page is also submitted in duplicate for fee charging purposes.

REAL PARTY IN INTEREST

The real party in interest is Thomson Consumer Electronics, Inc., a corporation of Delaware, the assignee of this application.

RELATED APPEALS AND INTERFERENCES

There are no other appeals or interferences that will affect, or be affected by, or have a bearing on the Board's decision in this appeal.

Docket No. RCA 89541

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE

THE BOARD OF PATENT APPEALS AND INTERFERENCES

Applicant: Mary Lafuze Comer

Art Unit: 2613

Serial No.: 09/428,322

Examiner: George A. Bugg

Filed: October 28, 1999

Title: APPARATUS AND METHOD FOR DERIVING AN ENHANCED DECODED REDUCED-RESOLUTION VIDEO SIGNAL FROM A CODED HIGH-DEFINITION VIDEO SIGNAL

APPLICANTS' APPEAL BRIEF

May It Please the Honorable Board:

For the reasons set forth below, Applicant respectfully requests that the examiner's Final Rejection dated April 22, 2003 be reversed. The following background information is provided in accordance with 37 CFR §1.192(c). The $330.00 fee for filing this Brief is to be charged to Deposit Account 07-0832.

Three copies of the Brief are enclosed. This page is also submitted in duplicate for fee charging purposes.

REAL PARTY IN INTEREST

The real party in interest is Thomson Consumer Electronics, Inc., a corporation of Delaware, the assignee of this application.

RELATED APPEALS AND INTERFERENCES

There are no other appeals or interferences that will affect, or be affected by, or have a bearing on the Board's decision in this appeal.

STATUS OF CLAIMS

Claims 1 – 24, all of the original claims, are the only claims pending and all are appealed.

Claims 1 – 5, 8, 10 and 11-24 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Boyce et al, U. S. Patent No. 5,614,957 cited by Applicant in the specification (page 1, line 26). Claims 6, 7 and 9, all of the remaining claims, were objected to as being dependent upon a rejected base claim (claim 1) and are included in this Appeal.

STATUS OF AMENDMENTS

An amendment after Final Rejection rewriting dependent claim 5 in independent form and making claims 7 and 8 dependent on rewritten claim 5 (instead of claim 1) was not entered on the basis it "raise(s) new issues and require(s) further search and consideration by the Examiner".

SUMMARY OF THE INVENTION

Television receivers are known which, while displaying a relatively large high resolution picture derived from a primary television channel, also simultaneously display one or more different picture-in-picture (PIP) images derived a second (or more) different television channels (see application, page 1, line 14). Because PIP images are small, there is no need to provide as high a resolution in the PIP display as in the primary display. It is therefore known to provide a lower resolution and less expensive second decoder for PIP (see application, page 1, line 22). One approach to such a second lower resolution decoder for PIP is described in the Boyce reference cited in this application (page 1, line 27) and relied upon by the Examiner for rejecting all of the claims.

Arrangements which are capable of processing High Definition Television (HDTV) signals typically include a motion-compensation-unit (MCU) processor (Drawings, FIG. 2, reference character 208) since HDTV signals include motion compensation information.

In accordance with the present invention, an enhanced motion-compensation-unit (MCU) processor 208 is provided in connection with a decoder 102 (FIG. 1). The decoder 102 is arranged for deriving, from data representing a primary image at a first resolution, an image at a second resolution less than that of the primary image. The enhanced MCU processor 208 is arranged for operating with blocks of pixel values (FIGS. 1a, 1b and 1c) representing the same image as is processed by decoder 102, at an intermediate third resolution lower than the first but higher than the second (claim 1). The combination of the intermediate resolution motion compensation unit 208 with the second lower resolution image information decoder 102 provides an improved PIP image quality at reduced cost and complexity (application, page 7, line 4) .

ISSUES

There is only one principal issue – does the disclosure by Boyce of three separate decoders, two of which are identified as a "reduced resolution decoder" for PIP display, operating on three different sets of image information to produce three different images (channels), render the claims of this application "obvious" ?

A subsidiary issue for the Board is whether there is any suggestion or motivation in the single reference to modify its teachings to arrive at the various combinations set forth in the rejected claims.

GROUPING OF CLAIMS

Claims 1 –10 stand as one group, claims 11 - 17 stand as a second group and claims 18 – 24 stand as a third group of claims.

ARGUMENT

INTRODUCTION

In the Examiner's "Response to Arguments" stated at page 2 of the Final Rejection, the Examiner's general statements ignore and/or misinterpret significant elements of Applicant's claims. These general statements regarding image size, bandwidth, resolution and the use, in general, of motion compensation processing in PIP displays are submitted to be not pertinent to the claimed invention set forth herein.

All claims of this application relate to methods and apparatus for processing data relating to one image of a reduced size PIP display. In the rejection, the Examiner has relied upon various elements of the cited reference which are employed to produce a main, full size image and two separate and different PIP images within the main display area. These multiple image displays are very different from and are not what is recited in the claims of this application. Attention will be directed below to specific language in the claims which makes these distinctions clear.

THE REJECTION

Claims 1-5, 8 and 10-24 have been rejected under 35 U.S.C. 103(a) as unpatentable (obvious) over U.S. Patent No. 5,614,957 – Boyce et al. In the rejection, each of the independent claims, apparatus claim 1, as well as method claims 11 and 18, have been rejected on the basis of Figure 4 of Boyce and the description thereof in columns 18 and 19 of the patent.

It is noted that certain aspects of Boyce are concerned with decoding a high-definition (HD) video signal and with producing one or more picture-in-picture reduced resolution images,

typically along with a full screen, higher resolution main image. Specifically, Boyce states, at col. 18, lines 25 – 31 (referring to Fig. 4):

" The primary decoder 401 is responsible for decoding the main picture of a picture-in-picture image while the first and second decoders (402, 403) are responsible for generating separate images which will be displayed in a small area of the main picture. A separate reduced resolution decoder 402 or 403 is used for each additional image that is to be displayed in addition to the main picture." (emphasis added).

At col. 18, lines 32 – 37, Boyce goes on to say:

" The output of the primary decoder 401 and the reduced resolution decoders 402 , 403 is (sic. "are") coupled to the input of a picture-in-picture video processing circuit which operates to combine the main picture with the reduced resolution pictures output by the reduced resolution decoders 402, 403 prior to the resulting combined picture being displayed." (emphasis added).

In the rejection of the claims, the Examiner identifies the "resolution" associated with Boyce's decoders 401, 402 and 403 for three different images as "resolution 1", "resolution 2" and "resolution 3", respectively. The Examiner states, in describing the resolution of these three different image decoders, "Boyce does not specifically teach resolution 3 being greater than resolution 2" (as is required in the combinations of apparatus/methods for processing a single image data set in all of the rejected claims, as will be pointed out below). Boyce states, at col. 19, lines 25 – 30:

" the illustrated PIP decoder arrangement is in no way limited to a specific degree of resolution with respect to the primary decoder 401 and only requires that the secondary decoder(s) 402, 403 be implemented as reduced resolution decoders as compared to the resolution supported by the primary decoder." (emphasis added).

Finally, the Examiner, mentions, without providing any specific information about resolution, that Boyce, at "Column 19, Lines 6 – 12 disclose a motion compensation circuit used in conjunction with the PIP decoder of Figure 4." (Final Rejection, page 4, lines 2 - 3).

It is quite clear from what Boyce says that each of his three decoders 401, 402, 403 processes a different image signal and produces a different image (i.e., a different channel). Furthermore, there is NO particular relationship between resolutions 2 and 3 (the separate PIP resolutions) of Boyce since each of the decoders 402 and 403 is intended to produce its own INDEPENDENT PIP image unrelated to the others. The resolutions "2" and "3" can be, and most likely are, in fact, equal resolutions according to what Boyce states.

Finally, Boyce does not disclose or suggest any special relationship between two different resolutions associated, respectively, with a motion-compensation-unit processing means and a "means responsive to ---a subset of frequency domain coefficients", both of which are associated with processing data signals from a SINGLE image data source as is the case with the presently claimed invention.

In the Final Rejection, there is no recognition of the fact that, unlike the three independent decoders for three independent images of the cited reference, in all of the rejected claims, there is only recited "an image" and "said image" (the same, single image throughout each claim). Nevertheless, the Examiner has concluded that Applicant's different, specifically recited combinations of apparatus and method elements, with specifically recited INTERDEPENDENT relationship between two reduced resolution image signals (e.g., "said image at an intermediate third resolution lower than said first resolution and higher than said reduced second resolution" – claim 1), relating to one image are unpatentable over Boyce because "it would have been obvious to one of ordinary skill in the art to utilize decoders of varying (?) resolution to achieve greater

PIP versatility" (Final Rejection, page 4, end of first paragraph).

THE CLAIMED INVENTION

Applicant's apparatus claims (claims 1 – 10) relate to a combination of elements "to provide an image at a reduced second resolution for display" (claim 1, line 3, emphasis added). According to claim 1, a "first means ----for deriving said image of said reduced second resolution for display" (emphasis added) includes:

(1) an "enhanced motion-compensation-unit(MCU) processing means, and"

(2) "second means for operating said enhanced MCU processing means with blocks of pixel values representing said image at an intermediate third resolution, etc" (emphasis added).

The claim goes on to specify that the third resolution is lower than the resolution of the first (e.g. "image at a first resolution") and higher than the resolution of the second image (e.g. a PIP image which is the one to be derived for display). Thus, the MCU which is INCLUDED in the recited "first means ---for deriving said image of--- second resolution" is OPERATED with blocks of pixel values representing the image at "an intermediate third resolution" lower than the first and higher than the second. This apparatus for operating on data in the MCU processor at a different resolution than is associated with other data for the same image is simply not disclosed or suggested by the reference.

Clearly, Boyce operates each of his main and PIP decoders on their own (independently) and never discloses or suggests operating a decoder for providing an image at a "second resolution" and a motion compensated unit associated with image-representative pixel values (of the same image) "at a third resolution" as is claimed. Boyce never discloses anything about a "third resolution" in the context of a main image and the same PIP image data. It is respectfully

submitted that there is no basis for holding Applicant's sophisticated claimed arrangement to be obvious in view of Boyce.

Similarly, independent method claim 11 recites a method "to provide an image of a reduced second resolution" including "using data at an intermediate third resolution, lower than said first resolution but higher than said –second resolution, to supplement data from said – second resolution in forming predictions for motion compensation" . All of this language relates to a single image, which steps are neither disclosed nor suggested by Boyce. Here again, the sophisticated combination of using data at second and third resolutions in the context of providing motion compensation for an image of second resolution is different from anything disclosed or suggested by Boyce and is submitted to be unobvious.

Independent method claim 18 recites a method related to processing data for a single image which comprises "generating motion compensated pixel block data at said third resolution from ----- said second resolution supplemented by said ---third resolution data" which, once again, is neither disclosed nor suggested by Boyce and is submitted to be clearly not obvious in view of Boyce.

The Examiner's conclusion that "It would have been obvious to one of ordinary skill in the art to utilize decoders of varying resolution to achieve greater PIP versatility", even if true, is respectfully submitted to be irrelevant in the context of the present invention. The gap between this statement and the particular claimed method steps and apparatus configurations relating to motion compensation in displayed images as pointed out above is submitted to demonstrate the unobviousness and patentability of all of the independent claims, and hence of all of the claims of this application.

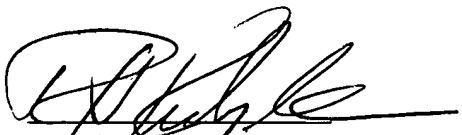
It is respectfully submitted that the cited reference, either alone or in combination with

what may be shown to be known by a person of ordinary skill, does not satisfy the requirements of teaching or suggesting modifying the reference in any manner to arrive at the claimed combinations. Furthermore, it is respectfully submitted that a prima facie case of obviousness is not made out on the basis of the Boyce reference since there is nothing which would suggest or motivate anyone to modify that reference in a way which would be consistent with the present claims. Finally, there would be no reasonable expectation of success for any purpose by modifying that reference. It is noted that the Examiner has acknowledged that the reference does not disclose all of the elements of Applicant's claims.

In view of the significant differences between each of the independent claims 1, 11 and 18 and the cited reference, all claims are submitted to be patentable over such reference. It is submitted that all of the claims are fully supported by the disclosure as originally filed.

In view of the foregoing, reversal of the Examiner's rejection of claims 1 – 24 and allowance thereof are respectfully requested.

Respectfully submitted,



Ronald H. Kurdyla, Attorney
Registration No. 26,932

December 11, 2003
Thomson Licensing Inc.
P.O. Box 5312, 2 Independence Way
Princeton, N. J. 08543 - 5312

CERTIFICATE OF MAILING

I hereby certify that this amendment is being deposited with the United States Postal Service as First Class Mail, postage prepaid, in an envelope addressed to the Commissioner for Patents Alexandria, VA 22313-1450 on:

December 11, 2003
Date

Linda Tindall
Linda Tindall

APPENDIX

Listing of Claims:

Claim 1 (Original) In apparatus for decoding compressed image data including frequency domain coefficients defining blocks of pixel values representing an image at a first resolution to provide an image at a reduced second resolution for display, said apparatus comprising:
first means responsive to a selected sub-set of said frequency domain coefficients for deriving said image of said reduced second resolution for display and including,
enhanced motion-compensation-unit (MCU) processing means; and
second means for operating said enhanced MCU processing means with blocks of pixel values representing said image at an intermediate third resolution lower than said first resolution and higher than said reduced second resolution.

Claim 2 (Original) The apparatus defined in Claim 1, wherein
said reduced second resolution is substantially ¼ of said first resolution; and
said second means operates said enhanced MCU processing at an intermediate third resolution which is substantially ½ of said first resolution.

Claim 3 (Original) The apparatus defined in Claim 1, wherein
said image at said reduced second resolution for display is a progressive-scanned image.

Claim 4 (Original) The apparatus defined in Claim 1, wherein
said image at said reduced second resolution for display is an interlaced-scanned image.

Claim 5 (Original) The apparatus defined in claim 1, wherein
said enhanced MCU processing means is responsive to base-layer pixel macroblock input values representing said image at said reduced second resolution and to pixel values representing

said image at said intermediate third resolution for deriving motion-compensated base-layer prediction macroblock output pixel values as a first output and motion-compensated enhancement-layer prediction macroblock output pixel residual values as a second output.

Claim 6 (Original) The apparatus defined in Claim 5 wherein

said second means comprises third means responsive to said selected sub-set of said frequency domain coefficients and to both said motion-compensated base-layer macroblock output pixel values and said enhancement-layer macroblock output pixel residual values for deriving both said base-layer macroblock input pixel values and said encoded enhancement-layer macroblock input pixel residual values.

Claim 7 (Original) The apparatus defined in Claim 1, wherein said second means comprises:

a base and enhancement-layer decimated-pixel memory;

unitary enhanced inverse discrete cosine transform (DCT), filtering and pixel-decimation processing means responsive to a selected sub-set of frequency domain coefficients for deriving base-layer blocks of output pixel values representing said image at said reduced second resolution as a first output and output enhancement-layer blocks of output pixel residual values representing said image at said intermediate third resolution as a second output;

fourth means, including a first adder for adding corresponding pixel values of said motion-compensated base-layer macroblock output pixel values from said enhanced MCU processing means and said base-layer blocks of output pixel values from said unitary IDCT, filtering and pixel-decimation processing means, for deriving values that are stored as base-layer data in said base and enhancement-layer decimated-pixel memory;

fifth means, including a second adder and an enhancement-layer encoder, for adding corresponding pixel residual values of said motion-compensated enhancement-layer macroblock output pixel residual values from said enhanced MCU processing means to said enhancement-layer blocks of output pixel residual values from said unitary IDCT, filtering and pixel-decimation processing means to obtain a sum output from said second adder for encoding by said enhancement-layer encoder, for deriving second input values that are stored as encoded

enhancement-layer data in said base and enhancement-layer decimated-pixel memory; and

sixth means for providing from said base and enhancement-layer decimated-pixel memory said base-layer pixel macroblock input values to said enhanced MCU processing means and for deriving said encoded enhancement-layer pixel macroblock input residual values applied as a second input to said enhanced MCU processing means from said stored encoded enhancement-layer data.

Claim 8 (Original) The apparatus defined in Claim 1, wherein

said frequency domain coefficients define image information that includes luma blocks of pixel values representing intracoded (I) and predictive-coded (P) progressive-scanned image at said first resolution.

Claim 9 (Original) The apparatus defined in Claim 7, including

seventh means comprising a sample-rate converter for deriving an ongoing display video signal from base-layer blocks of output pixel values.

Claim 10 (Original) The apparatus defined in Claim 1, wherein

said reduced second resolution is substantially ¼ of said first resolution; and

said intermediate third resolution is substantially ½ of said first resolution.

Claim 11 (Original) In a system for decoding compressed image data in the form of pixel blocks representing an image at a first resolution to provide an image of a reduced second resolution, a method of decompressing a pixel block of said first resolution by:

selecting a sub-set of frequency domain coefficients in said pixel blocks of said compressed image data;

processing elements of said sub-set of frequency domain coefficients to provide pixel data representing pixels comprising a spatially distributed sub-set of pixels in a pixel block of said image at a first resolution and excluding other pixels of that pixel block, said processing including

using data at an intermediate third resolution, lower than said first resolution but higher

than said reduced second resolution, to supplement data from said reduced second resolution in forming prediction for motion compensation; and

formatting said pixel data representing pixels comprising said spatially distributed sub-set of pixels to provide said image of said reduced second resolution.

Claim 12 (Original) A method according to claim 11 including the step of

selecting different spatially distributed sub-sets of pixels for interlace and progressive image output.

Claim 13 (Original) A method according to claim 11 wherein said formatting step comprises,

upsampling said pixel data representing pixels comprising a spatially distributed sub-set of pixels to provide said image of said reduced second resolution.

Claim 14 (Original) A method according to claim 11 wherein said processing step includes the step of,

selecting said spatially distributed sub-set of pixels based on desired PIP picture characteristic.

Claim 15 (Original) A method according to claim 14 wherein

said PIP picture characteristic comprises at least one of (a) PIP picture size, (b) whether said PIP picture is interlace or progressive, and (c) PIP picture vertical and horizontal pixel resolution.

Claim 16 (Original) A method according to claim 11 wherein said formatting step includes the step of ,

adaptively filtering pixel data representing pixels comprising a spatially distributed sub-set of pixels using a filter function selected based on at least one of, (a) motion vector type, (b) group of picture (GOP) structure, (c) a GOP boundary transition, (d) whether I, B or P frame, and (e) whether interlace or progressive frame reduced second resolution output required.

Claim 17 (Original) A method according to claim 11 wherein said formatting step includes the step of ,

adaptively filtering pixel data representing pixels comprising a selected spatially distributed sub-set of pixels using a filter function selected from at least one of, (a) a vertical pixel data filter, (b) a horizontal pixel data filter, (c) a chrominance data filter, and (d) luminance data filter.

Claim 18 (Original) In a system for decoding compressed image data in the form of pixel blocks representing an image of a first resolution to provide an image of a reduced second resolution, a method comprising the steps of:

generating data representative of an image pixel block at an intermediate third resolution lower than said first resolution but higher than said reduced second resolution;

generating motion compensated pixel block data at said third resolution from said pixel block data of said reduced second resolution supplemented by said intermediate third resolution data; and

deriving pixel data representing said image of said reduced second resolution from said motion compensated pixel block data at said third resolution.

Claim 19 (Original) A method according to Claim 18 wherein the steps of claim 18 are performed for P frames exclusively of I and B frames.

Claim 20 (Original) A method according to Claim 18 wherein the steps of claim 18 are performed for P frames and one of, (a) I frames and (b) B frames.

Claim 21 (Original) A method according to Claim 18 including the step of upsampling said pixel block data at said third resolution to provide image data of said first resolution.

Claim 22 (Original) A method according to Claim 21 including the step of

downsampling said upsampled pixel block data of said first resolution to provide image data of said second resolution.

Claim 23 (Original) A method according to Claim 21 including the step of downsampling said upsampled pixel block data of said first resolution to provide said intermediate third resolution data.

Claim 24 (Renumbered) A method according to Claim 18 wherein said pixel block data of said third resolution comprises residual data.

PTO/SB/17 (10-03)
...ed for use through 07/31/2006. OMB 0651-0032
U.S. Patent and T... ...ark Office: U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction ... of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

FEE TRANSMITTAL for FY 2004

Effective 10/01/2003. Patent fees are subject to annual revision.

☐ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT ($) 330

Complete if Known	
Application Number	09/428,322
Filing Date	10/28/1999
First Named Inventor	M.L. Comer
Examiner Name	G.A. Bugg
Art Unit	2613
Attorney Docket No.	RCA 89,541

METHOD OF PAYMENT *(check all that apply)*

☐ Check ☐ Credit card ☐ Money Order ☐ Other ☐ None

☒ Deposit Account:

Deposit Account Number: 07-0832

Deposit Account Name: THOMSON LICENSING INC.

The Director is authorized to: *(check all that apply)*
☒ Charge fee(s) indicated below ☒ Credit any overpayments
☐ Charge any additional fee(s) during the pendency of this application
☐ Charge fee(s) indicated below, **except for the filing fee** to the above-identified deposit account.

FEE CALCULATION

1. BASIC FILING FEE

Large Entity Fee Code	Large Entity Fee ($)	Small Entity Fee Code	Small Entity Fee ($)	Fee Description	Fee Paid
1001	770	2001	385	Utility filing fee	
1002	340	2002	170	Design filing fee	
1003	530	2003	265	Plant filing fee	
1004	770	2004	385	Reissue filing fee	
1005	160	2005	80	Provisional filling fee	

SUBTOTAL (1) ($) 0

2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

			Extra Claims		Fee from below		Fee Paid
Total Claims		- ** =	0	X		=	0
Independent Claims		- ** =	0	X		=	0
Multiple Dependent				X		=	0

Large Entity Fee Code	Large Entity Fee ($)	Small Entity Fee Code	Small Entity Fee ($)	Fee Description
1202	18	2202	9	Claims in excess of 20
1201	86	2201	43	Independent claims in excess of 3
1203	290	2203	145	Multiple dependent claim, if not paid
1204	86	2204	43	** Reissue independent claims over original patent
1205	18	2205	9	** Reissue claims in excess of 20 and over original patent

SUBTOTAL (2) ($) 0

**or number previously paid, if greater; For Reissues, see above*

FEE CALCULATION (continued)

3. ADDITIONAL FEES

Large Entity Fee Code	Large Entity Fee ($)	Small Entity Fee Code	Small Entity Fee ($)	Fee Description	Fee Paid
1051	130	2051	65	Surcharge - late filing fee or oath	
1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet.	
1053	130	1053	130	Non-English specification	
1812	2,520	1812	2,520	For filing a request for reexamination	
1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action	
1805	1,840*	1805	1,840*	Requesting publication of SIR after Examiner action	
1251	110	2251	55	Extension for reply within first month	
1252	420	2252	210	Extension for reply within second month	
1253	950	2253	475	Extension for reply within third month	
1254	1,480	2254	740	Extension for reply within fourth month	
1255	2,010	2255	1,005	Extension for reply within fifth month	
1401	330	2401	165	Notice of Appeal	
1402	330	2402	165	Filing a brief in support of an appeal	330.00
1403	290	2403	145	Request for oral hearing	
1451	1,510	1451	1,510	Petition to institute a public use proceeding	
1452	110	2452	55	Petition to revive – unavoidable	
1453	1,330	2453	665	Petition to revive – unintentional	
1501	1,330	2501	665	Utility issue fee (or reissue)	
1502	480	2502	240	Design issue fee	
1503	640	2503	320	Plant issue fee	
1460	130	1460	130	Petitions to the Commissioner	
1807	50	1807	50	Processing fee under 37 CFR 1.17 (q)	
1806	180	1806	180	Submission of Information Disclosure Stmt	
8021	40	8021	40	Recording each patent assignment per property (times number of properties)	
1809	770	2809	385	Filing a submission after final rejection (37 CFR § 1.129(a))	
1810	770	2810	385	For each additional invention to be examined (37 CFR § 1.129(b))	
1801	770	2801	385	Request for Continued Examination (RCE)	
1802	900	1802	900	Request for expedited examination of a design application	
				Other fee (specify) ____	

*Reduced by Basic Filing Fee Paid **SUBTOTAL (3)** ($) 330

SUBMITTED BY				Complete *(if applicable)*	
Name (Print/Type)	Ronald H. Kurdyla	*Registration No. (Attorney/Agent)*	26,932	*Telephone*	609.734.6818
Signature				*Date*	12/11/03

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing this form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.